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THE SCOPE AND METHOD OF FOLK-PSYCHOLOGY.

SCIENCE, with all its wonders, has presented no more remarkable spectacle than the order of its own development in time, to which Comte first drew attention, namely, the emergence of the special sciences in the order of their remoteness from man. Man constructed a science of numbers, of the stars, of molar and molecular masses, of plants, of stones, and of creeping things, before he realized that he was himself an object capable of receiving scientific attention. This anomaly is doubtless due to the fact that always and everywhere man has been at the head of the series of nature, and his superiority to the lower orders of life has been so obvious as to generate in him the conceit that he had nothing in common with them. Every savage tribe, until disturbed by civilization, imagines that it occupies the very center of the earth, and that it is the most perfect specimen of the human race. Its river is the "Father of Waters," its mountain the "Navel of the Earth." The Chinese call their country the "Flower of the Center," and themselves the "Sons of heaven," and the nations bordering on the "Celestial Empire" they know as "dogs," "swine," "demons," and "savages."¹

The earliest disturbance of this anthropocentric view came in illusions concerning his relation to the supernatural to which man was subjected through the possession of an elaborate nervous organization; but these also accentuated his tendency to separate himself in thought from the objects surrounding him. And scientific interest in man has, even in these latter days, been so far overshadowed and impeded by an interest in his relation to a spirit world that a denomination of men as "good and bad," like the farmer's classification of animals as "stock and vermin," has been too readily accepted as practically covering the case.

¹ ÉLISÉE RECLUS, *The Earth and Its Inhabitants: Europe*, Vol. I., p. 3.

The widening of the middle age *orbis terrarum* through voyages of discovery led to the science of ethnology, and the works of Linnæus, Buffon, Lamarck, and Darwin hastened the formulation of somatic anthropology. In the course of time prehistoric archæology, folk-lore and folk-psychology have been added to these, and the term anthropology, like biology, is now used in a large way to designate a congeries of separate sciences—if, indeed, we permit ourselves to call any body of knowledge whatsoever a separate science. In each of these aspects the science of man has been making splendid headway, but it has been so absorbed in the preliminary task of collecting and classifying its materials that it has been able to do no more than approach its main task, the determination of the developmental relation of individual to race consciousness, and the relation of both to accompanying institutions and usages. In the division of labor incidental to the handling of a vast body of material, this special task has been assumed by folk-psychology; and further advance in certain lines of individual psychology and social philosophy are dependent on reliable generalizations from this field.¹ In the preface to his recent work on “Mental Development in the Child and the Race” (in which he is able to say embarrassingly little of the race), Professor Baldwin says very frankly that the attempt to work out a theory of mental development in the child resulted in “the conviction that no consistent view of mental development in the individual could possibly be reached without a doctrine of the race development of consciousness, *i. e.*, the great problem of the evolution of mind;” and Professor

¹ The Germans have called this phase of anthropolygy by several names: folk-psychology (*Völkerpsychologie*), psychical anthropology, ethnological psychology. By whatever name we call it, we must recognize that it is not strictly coördinate with the other branches of anthropology. It studies the conditions and changes in life-direction displayed by the more elementary social aggregates, and in this respect its materials are coincident with those of ethnology, somatic anthropology, prehistoric archæology, and folk-lore; but it uses also, in a minor way, data furnished by philology, history, individual psychology, demography and sociology. In the same way, individual psychology is related to and dependent on zoölogy, anatomy, and physiology, but is conveniently and properly treated as a separate discipline.

Wundt has declared with equal frankness that the problem is beyond the reach of the experiment of the psycho-physicist: "Our psycho-physical experiments have to do with the consciousness of the evolved man; . . . we learn little of psychic development through them. Their application to psychic disturbances will be presumably a limited one; it sheds light upon the nature of the more profound disturbances less by direct investigation than by giving information about the changes which are associated with the condition and rise of these disturbances. But preëminently the psycho-physical experiment is concerned with the analysis of relatively elementary processes, with simple acts of perception, will, and memory; only in a limited way can it follow out the association of these simpler processes. The development of the real thought process and of the higher forms of feeling and impulse is closed to it; at the most some insufficient observations can be made also on the external, temporal succession of these processes."¹

The natural approach to this question is through anthropology; but the prominent methods of anthropology have been weighing, measuring, and classifying, and like those of psycho-physics, able to contribute to the developmental history of mind only in a meager and indirect way. If we examine, for example, two of these methods, determination of brain-weight, and craniometry, we shall see that they have had at best only a classificatory value, and no direct bearing on the laws of mind.

The human brain doubtless contains the whole story of its own development, if only the story could be read out; but morphologically it represents capacity of response to stimuli received from variables in the external world, beginning with the protozoan period, and its development cannot be studied profitably except in connection with these variables. Functionally, also, the importance of the brain has been unduly emphasized by certain anthropologists. There is far less direct connection between intelligence and brain mass and form than was at one time

¹ W. WUNDT, *Essays*, p. 145.

presumed. It is true that the cerebral lobes are the seat of consciousness; but the brain is no more essential to intelligence than is the circulation, or digestion, or the liver. Intelligence is the mediation of action, and all organs and tissues which coöperate in forming an association, are equally important with the brain. The five heaviest brains recorded by Topinard are those of Tourgenieff (2020 gr.), a day-laborer (1925 gr.), a brickmason (1900 gr.), an epileptic (1830 gr.), and the illustrious Cuvier (1830 gr.) French anthropologists have reckoned the average brain-weight as 1360 grammes, and the inferior limit of brain-weight compatible with reason as 1000 grammes. But when their idol Gambetta lately willed them his brain and died, they were mortified to find that it weighed only 1100 grammes—just 100 grammes above the point of imbecility. These facts merely show that preconceptions were wrong, and that anthropology has made itself more scientific in this regard. Gross anatomy of the brain, especially in the hands of surgeons, and fine anatomy, in the hands of neurologists, have established important laws of growth and of mental pathology, but no anthropologist can venture to say of a series of brains which are male and which female, which Chinese and which German. The whole matter of the relation of intelligence to brain-weight, and of the nature and quantity of energy which is a function of this organ, is, indeed, fundamentally a question of physiological chemistry. The assumption that capacity for muscular work is in direct proportion to the mass is approximately correct; but the assumption that capacity for mental work is in proportion to the mass of nerve substance is a gross error, as anthropologists now very well know. Physiologists are, indeed, compelled to assume a different principle of metabolism in the nerves from that of the muscles, though the nerves have thus far eluded inquiry in this direction.

Examination of the brain capsule and calculation of its capacity (craniometry), and superficial measurements upon the head of the living (cephalometry), have, in the nature of the case, still more attenuated connections with the development of

race consciousness. They have been of some service in the attempt to classify races and to distinguish the elements of population in a given region, but every attempt to establish a regular connection between form and function has been disastrous. The best example of the absurdities into which craniometry has led its devotees is Lombroso's criminal type. Lombroso found a number of cranial characters prevailing in criminals, and concluded that an individual in which these characters prevailed was a born criminal. But he measured only criminals, while Bär¹ recently found that precisely the same cranial characters prevailed among normal individuals as among Lombroso's criminals. It thus turns out that the characters which Lombroso found prevailing in criminals are simply those which occur most regularly in the human species, or at any rate in the lower strata of the societies in question. A comparison of the painfully elaborated methods of craniometry fills one with a lively sense of the vanity of all of them; and there is at present a tendency among anthropologists to make their cranial measurements very few and simple.

Craniometry and the determination of brain weight have been pursued in part as aids to the classification of races. But the classification of races has itself thus far proven an *ignis fatuus*. The question is no nearer solution than when Blumenbach one hundred and twenty years ago made the classic division of five which still stands in school books. Meantime the number has ranged from three to sixty-three; and the latest classification by de Quatrefages into white, black, yellow, and mixed, has no merit except simplicity; for, as no one has insisted more strongly than de Quatrefages himself, no pure race has existed on the earth within historic times. Wherever man has been met, his blood has already been mixed through crossing, migration, and conquest. How this mixture came about, and when, is a question which, if not futile, is of much importance, but there is no occasion at present to modify the impatient expression of Sir Henry Maine, that race theories "appear to have

¹ A. Baer, *Der Verbrecher in Anthropologischer Beziehung*, Leipsic, 1893.

little merit except the facility which they give for building on them inferences tremendously out of proportion to the mental labor which they cost the builder.¹" But the formation of artificial or historic races, through the influence of *milieu* and the diffusion of a common fund of beliefs, sentiments, ideas, and interests among a heterogeneous population brought by hap and chance into the same geographical zone, is taking place before our eyes at the present moment, and is a matter of history; and we are safe in assuming that in this the process of the formation of true races is repeating itself.

It was inevitable that anthropology, like biology, should first collect and classify its material. Every scrap of knowledge it has brought to light is precious, and its classification of its materials, though like all classifications more or less arbitrary, is useful, if not used for more than it is worth. But anthropology has undergone a change well illustrated by the difference between the biological botany of today, and the "herbarium" botany of the past; its primary interest is in the laws of growth. Among those who led in this change of direction—in theory, at least—are Bastian, Lazarus, Steinthal, Waitz, Weinhold, Post, Andree, Ratzel and Achelis—some of them philologists rather than anthropologists.² They have insisted that our customs, our laws, our arts, our religion, our speech, our minds, are the product of society in common, and that through a comparative examination of the languages, ceremonies, usages, and institutions of primitive peoples, we have means of entering the region which Wundt despaired of penetrating with the psycho-physical experiment, and of tracing the laws of the progressive unfolding of the psychical activities of man. "Only in and through society is a man a psychical being and raises himself above the type of a zoölogical species of the animal organisms to an individual personality."³

¹ *Early History of Institutions*, Lecture III.

² Among others, Tylor, Spencer, de Greef, Tarde, Le Bon, and Fouillée, who presumably have not come under the influence of German theories, have contributed to this movement.

³ STEINTHAL, *Zeitschrift des Vereins für Volkskunde*, Vol. I, p. 12.

German folk-psychologists (including many who call themselves ethnologists) have insisted that man has heretofore been only partially viewed; individual psychology has relied on the statistics of education, introspection, and data from insane asylums, and history has heretofore been the relation of the development of castes, whereas the development of spirit, which is ossified in dogmas and systems, can be seen only in the great masses of humanity, who draw their sap direct from mother earth. They have insisted on the identity of human spirit in all zones—an identity underlying all external differences and local coloring. The races of men, like the palm of the south and the fir of the north, are identical in the principle of their growth; and ignoring the local, the incidental and eccentric, we should find similar and universal laws of growth among all peoples.¹

The discovery of a great principle, that of parallelism in development, has resulted from this view. Every community, as far as it rises toward a culture condition, seems to take the same steps as every other community rising to the same level of culture; whether these steps are taken invariably in the same order, folk-psychologists are not yet able to say. But the fact of similarity or identity of custom, art, superstition, ceremony, tradition, or technology, is no longer to be regarded as a proof of ethnic relationship, but a manifestation of the practical identity of the human spirit in its operations in all times and places. Another great principle already established, is that every culture community contains in itself survivals of the earlier stages through which it has passed, just as the animal organism of the higher type contains survivals from and reversions to the lower stages of its evolution. Folk-lore has been so active in amassing survivals that we may say of superstition, for instance, that it is as dense today in central Germany as in central Africa.

The general criticism may be made of German folk-psychologists that in their insistence on the reality of a collective

¹ Cf. A. Bastian, *Der Mensch*, Vol. I, p. 11; *Der Völkergedanke*, pp. v, 172, *et passim*.

human consciousness they have seemed to make the individual at every point the creation of social conditions, losing sight of the rhythm between the individual consciousness and social consciousness whereby each is enabled to live more fully. They have proceeded, too, in the main, on the assumption that in the savage society we have the culture society at a lower historical point, and that the laws of social growth can be understood only in their most crude manifestations. In this they resemble those biologists who assume that the laws of growth can be adequately determined from a study of micro-organisms. But in determining the chemistry of digestion, for example, the physiologist must work with masses larger and more highly organized than the *amœba*; and the social structure of savage communities, while very suggestive, is likewise often too incomplete, when taken alone, for the purpose of the folk-psychologist. A knowledge of the present must be combined with the knowledge of the past for an adequate understanding of any part of the past. The nature-peoples are not communities in process of becoming culture-peoples; they are as old as we, and in the very fact that they have not become like us we may hope to find the laws of social physics which raised us above them.

Herbart, who must be regarded as the pioneer in folk-psychology, declared that "ideas move in our minds with as much regularity as the stars move in the heavens." The discovery of the law of parallelism in the customs and culture of different tribes and races is a confirmation of this view, and suggests the necessity of a method more fundamental than any based on race differences; and in order to secure a fundamental basis of procedure we shall be wise if we avail ourselves of the knowledge recently brought to light by physiologists in connection with the phenomena of irritability in general. Irritability is the distinctive property of living matter. It is that quality of plants and animals in virtue of which stored up energy is set free by an external stimulus; it is therefore the basis of all somatic and psychic life. We are familiar with the fact that animals having special organs of sense receive through them

stimuli calling forth activity, but physiologists can also orient at will the lower forms of life, both plants and animals, by means of light, heat, electricity, acids, gravity, hard surfaces, etc. This capacity of response is called in its various manifestations, heliotropism, galvanotropism, chemotropism, geotropism, and stereotropism. Different plants and animals respond in various ways to these mechanical stimuli, the same stimulus in some cases attracting one form and repelling another, and the same organism responding in different ways to different degrees of intensity of the same stimulus, but there is no doubt that the control of the sentient life of the lower stadia of living matter falls directly under the fixed laws of physics and chemistry. All instincts of animals, their habits, sagacity, migrations, and reproductive life, find their explanation largely in these "tropisms." The views of certain recent writers, including Mr. Romanes, on the nature of animal intelligence were really obsolete when they left the press.

In the more lowly organized forms all stimuli are mandatory. Hunger, for example, calls out motion through changes produced by katabolism in the organism, whereby it is attracted chemotropically to food. In the higher forms higher nervous centers and the power of inhibition and choice are developed, along with special organs of sense and locomotion. What is important for our purpose is that, given the property of irritability, due to chemical constitution, which responds by movement to certain stimuli and exhibits through dissociation of atoms an energy which from being purely mechanical becomes more and more purposive, we have a starting point for the interpretation of the psychical energies of man. Differences in temperament in individuals and in races must be regarded as due to the same causes as positive and negative heliotropism or chemotropism in plants and animals, namely, chemical constitution. The temperament, character, or genius of a people predetermines within certain limits the spirit of its institutions; it is the direct exponent of the quality of racial irritability, and apparently more fundamental, persistent and inimitable than intellectual

traits. We are all aware how apt the Orientals who attend our universities are to acquire our intellectual habits, and how superficial an impression our pedagogical systems leave on their character. "Scratch a Russian and you will find a Tartar." Very little is yet known of the relation of national temperament to conditions of food, climate, ancestry, etc., but striking differences exist, and it is important to recognize that the form and spirit of the art, literature, ethics and politics of different races are to be regarded as an expression of the temperament even more than of the intelligence of the people. There is, too, an interesting parallelism between lower forms of social organization, lower organic forms of life, and the child, in the fact that they are all controlled largely by mandatory stimuli. Great popular movements and national upheavals, like the French Revolution and the Protestant Reformation, are always temperamental rather than intellectual expressions, and we are correct in calling these movements instinctive. The substitution of action based on knowledge for action based on feeling is made possible in the individual and in society by the development of higher centers of control and the power of choice through inhibition and legislation. The fact that such a substitution is one of the professed aims both of pedagogy and of sociology gives peculiar interest to the examination of the forms of control which have dominated different types of society, and the determination of the conditions and forces leading from one form of control to another.

The animal in the protozoan period is played on solely by the forces of external nature. In societies, especially in human society, another set of stimuli is introduced, and the nature of reaction on stimuli in general is modified. Language and memory give every member of the group opportunity to play upon the nature of every other member of the group. The individual is no longer a harp played upon by natural forces, but in a far greater degree by social forces: words, ideas and sentiments are substituted for light, gravity and acid. In this way we first get the great problem of association clearly before

us, and are on the way to work out the laws of human emotion and intelligence. Irritability, or as we call it in human society, sensibility, is the quality in virtue of which we get any reaction; intelligence is the mediation of the direction of the action, and education (association, tradition of ideas, discipline, precept, coercion), represents all possible stimuli which may reach the individual from society, modifying old impulses and life-directions, and calling out new ones. Morality is a term whose content varies immensely among different peoples, but it is, in its widest meaning, a feeling in favor of the forms of practice which have proven of life-saving advantage to a people, and which by heredity, tradition and authority have become relatively fixed.

"Empirically all changes manifest themselves as the result of the universal reciprocal action between the simplest part and the sum of all the parts of nature,—an action which expresses itself physically as gravity, heat, light, chemical affinity; sociologically, as nervous energy, speech, association, etc."¹ For working purposes we take the individual as "the simplest part of nature," or rather as the unit on which "the sum of all the parts of nature" act, and which are acted on in turn by him, and it will be convenient to set over against him the variables which condition this action. The order in which these variables are considered is not all-important, since they coëxist in varying proportions at every stage. A convenient working schedule is the following:

1. Habitat. Food-conditions. Anthro-po-geography. (Conditioning temperament and aptitude.)
2. Somatic anthropology: laws of growth and variation; effects of crossing and interbreeding; heredity, atavism, etc.
3. Reproductive life; love and marriage; the psychology of sex; sex as a social stimulus.
4. Technology: the useful arts; science.
5. Æsthetic.

¹ A. SCHAEFFLE, *Bau und Leben des socialen Körpers*, Vol. II., p. 20.

6. Animism (Religion, Myth, Superstition).
7. Jurisprudence, Politics (Formal control).

Morality, like intelligence, is a function of each of the foregoing captions. It represents predominantly the affective, as intelligence represents the intellectual, phase of consciousness. Language, reflecting the content of consciousness, and pathological conditions, marking the failure of normal correlations and instincts (unfitness, immorality), are valuable aids at every point.

Food and sex, like the foci of an ellipse, are the points about which the whole process turns. These were the great original stimuli to action and culture, and "making war, making love, and making things" have been very aptly called by Miss Simcox man's chief occupation. War has been primarily with reference to territory on which to find food; and in connection with this, and with that other form of war which we call "the struggle for existence," systems of law, politics, morals and religion have indirectly arisen. Technology, in its relation both to war and to industry, has been connected with food. Art reflects the affective side of the life process, and it has shown in its whole course a predilection for love and war. No very considerable body of art except architecture would remain, indeed, if we omitted these motives.

A statement of life in terms of food and sex is as crass, when applied to culture conditions, as the chemical definition of man as "forty pounds of carbon and nitrogen scattered through five pailfuls of water." But it is important to recognize that food and sex are the irreducible factors of social life; and beginning with these, we may hope to understand the meaning of the different variables of society: ideas, institutions, beliefs, sentiments, language, arts, literature—and to trace the "red thread" of consciousness through them.

W I. THOMAS.

THE UNIVERSITY OF CHICAGO.